

HELP A FARMER TO HELP FARMLAND BIRDS

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Introduction

Farmland bird populations have declined across Europe by 57% overall since 1980¹ with those in Western Europe declining the most. UK population figures are calculated from the annual BTO Breeding Bird Survey (BBS), but assessing Kent-wide fluctuations is a challenge as few birders have farmland as a local patch, and few farms attract birders to 'hotspots' in the way that coastal sites or reserves do. In this account, therefore, I look at the status of two species in Kent, Yellowhammer *Emberiza citrinella* and Linnet *Carduelis cannabina*, how their populations have been monitored and recorded, and their current numbers in the Low Weald immediately around Marden.

I then provide an account of how ordinary birders can supplement data on species' distribution and abundance, and how they might contribute to their conservation through active engagement with landowners. Finally, I raise wider questions about how information on Kent's bird population is gathered and made available for conservation purposes.

Historical status

KOS has carried out three structured surveys of the county's breeding birds: in 1967-73,² 1988-94³ and 2008-13.⁴ Linnet were recorded as breeding or possibly/probably breeding in the four tetrads centred around Marden in all three surveys. Yellowhammer were similarly recorded although, curiously, were absent in the 1967-73 survey. However, as they were recorded with a breeding status in 82% of the county's tetrads in that first survey, including those surrounding Marden, it is possible that the absence was due to observer error.

The 2008-13 KOS Atlas recorded a reduction in distribution for both species since the 1988-94 survey. Yellowhammer were shown declining mainly in the northern half of the county, and it was suggested this could be due to agricultural changes leading to reduced winter survival. Linnet showed a similar range reduction, but mainly towards the west of the county. Decline was again linked to agricultural change but in this case leading to breeding season loss from reduced nesting habitat and food resources. The hectad in which Marden is more or less centrally placed showed little change in distribution or breeding success for both species.

Since 2013, BBS indices for both species in England (Figs.1&2) show Yellowhammer continuing to decline while Linnet have recently seen a modest upturn in population since the last KOS atlas.

More recently, reported peak monthly counts of Yellowhammer at regularly watched sites in the KOS Kent Bird Report 2017⁵ continued to show a downward trend from 2016, and were significantly lower than those recorded on the same sites in 2007. No such declines were noted for Linnet, or evident in the regularly watched sites over the same period. While the BBS reporting rate for Yellowhammer in Kent in

2017 was similar to 2016, there was still a fall of 6% in England as a whole, and the species was reported as present in only 40% of Kent's randomly selected squares compared with 70% in 1994.

Fig. 1

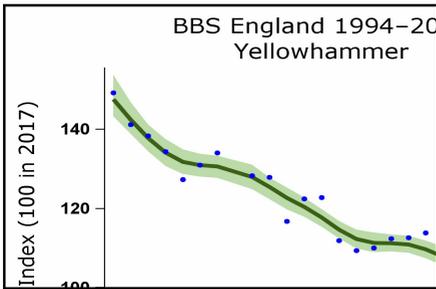
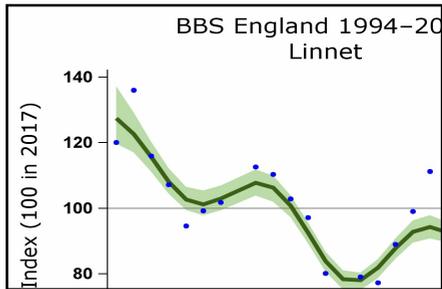


Fig. 2



As Marden is now included in the Kent Bird Report as a regularly watched inland site, its winter farmland bird population compares favourably with other, more established ones. Yellowhammer can often be seen in good numbers, as well as Goldfinch *Carduelis carduelis* and Reed Bunting *Emberiza schoeniclus*. Kent's largest winter flocks of 300 Linnet, 500 Chaffinch *Fringilla coelebs* and 200 Brambling *Fringilla montifringilla* were recorded there in 2017.

Data from the BTO's surveys in 1994 show steep declines in all farmland birds, and are reflected in KOS peak winter counts at regularly watched sites. Comparison of Marden with 1994 data is not possible as it was not a regularly watched site at that time. However, nearby inland sites at Boughton Park (BP) and Bough Beech Reservoir (BBR) were. Peak winter counts of 102 Chaffinch were recorded at BBR, with 50 and 130 Linnet at BP and BBR respectively. It is reasonable to assume that Marden numbers may well have been similar, so the relatively high winter numbers now encountered appear not to reflect national population declines. This could be explained by the current work with local farmers outlined below.

Assessing current Yellowhammer populations in Marden

This is an ongoing project on a number of farms around the village, the majority operated by Peter Hall of HE Hall and Son Ltd., and involves a mixture of regular observation, structured surveys and, since 2015, regular ringing sessions throughout the year. As I describe in more detail below, a working relationship has now been established so that farming operations are carried out, as far as possible, in ways that support birds and wildlife generally. This relationship also embraces the use of volunteers to monitor a range of species across the natural environment.

The very nature of farmland landscape often means that birds are generally dispersed along field margins (if they exist) and hedgerows during the breeding season, but winter birding is made easier when birds congregate in flocks to feed on stubble or recently ploughed soil. This experience is transformed when winter bird crops (WBCs) are sown specifically to provide winter food for birds and to

mitigate the impact of the ‘hungry gap’ in the new year when food in the natural environment is depleted and birds risk starvation in hard weather.⁶ A typical crop will include sunflowers, barley, wheat, triticale, sorghum, white and red millet and linseed. The mixture ensures seed is available to attract larger-billed finches (sunflower), Linnets (linseed), Yellowhammers (wheat) and both species of sparrow *Passer spp* (red and white millet), plus a host of other seed eaters and species that feed on invertebrates in the untreated crop. In hard weather even a modest field of a hectare or two will attract mixed flocks of many hundreds of birds – on a particularly cold early February morning in 2019, an estimated thousand Linnets were recorded around a large field with a winter bird crop during a BTO survey visit. With these, of course, come the raptors, so relatively close-up views of sparrowhawk *Accipiter nisus*, Kestrel *Falco tinnunculus* and even Peregrine falcon *Falco peregrinus* are commonplace.

Supplementary feeding, strewing seed directly onto the ground, is another approach, but lacks the advantage of cover for ground feeders and naturally occurring invertebrates afforded by a standing crop. It does, however, make capturing birds for ringing much easier as they are drawn to a closely confined area. Apart from collecting valuable quantitative data (for the farmer as well as the BTO), the recapture of a bird ringed elsewhere in the UK or abroad is a valuable lesson for the landowner – what they do on their land can have an impact on birds that breed across the whole of the UK and Europe, or those that breed here but winter as far south as South Africa.

At the time of writing (April 2020) 101 species have been recorded on the farms. Half have been recorded as probable or confirmed breeding, and 51 species have been ringed.

Our winter ringing sessions, however, tend to focus on the (mainly) farmland species drawn to the feeding areas provided for them. In 2017, 14 ringing sessions were carried out (seven in January to March and seven in October to December) in a field where supplementary feeding was being carried out as part of a DEFRA Higher Level Stewardship agreement. This was repeated the following year, although weather conditions constrained us to eleven visits. When we compared our ringing totals with those from elsewhere in Kent and the UK, we discovered that our numbers of Yellowhammer and Linnet were quite substantial (Fig. 3).

Fig. 3

| Totals of Yellowhammers and Linnets ringed in Marden expressed as a percentage of totals ringed in Kent and UK | | | | | | |
|---|------------------|-------------------|------------------|-------------------|--------------------------------|-------------------|
| | 2017 (14 visits) | | 2018 (11 visits) | | Adjusted for 14 visits in 2018 | |
| | Total | Marden % of total | Total | Marden % of total | Total | Marden % of total |
| Yellowhammer | | | | | | |
| Marden | 190 | | 112 | | 143* | |
| Kent | 239 | 79.5 | 131 | 85.5 | 162 | 88.3 |
| England | 4571 | 4.2 | 4439 | 2.5 | 4470 | 3.2 |
| GB & Ireland | 5145 | 3.7 | 4945 | 2.3 | 4976 | 2.9 |
| | | | | | | |

| Linnets | | | | | | | |
|----------------|------|------|------|------|------|------|--|
| Marden | 163 | | 158 | | 201 | | |
| Kent | 228 | 72.8 | 363 | 43.5 | 406 | 49.5 | |
| England | 4980 | 3.3 | 4409 | 3.6 | 4452 | 4.5 | |
| GB & Ireland | 8530 | 1.9 | 9236 | 1.7 | 9279 | 2.2 | |

*Mean number of birds ringed in 11 visits in 2018, multiplied by 14 (to compare with 14 visits in 2017)

It is, of course, important to draw a distinction between the numbers of birds ringed or sighted, which will vary according to effort put in, and actual population sizes. And comparisons with other areas are misleading without comparative data on effort. But it set us thinking. Were all these Yellowhammers and Linnets resident and breeding in the area? In the case of Linnets, almost certainly not as their winter numbers could be swollen by continental birds.

Yellowhammers, on the other hand, are largely sedentary, rarely travelling more than 25km from their natal area, and the median distance for the recovery of ringed Yellowhammers is less than 1km.⁷ Also, as natal dispersal is <20km (median 2km) and 95% of ringing recoveries are < 25km (median <1km)ⁱ this suggested a significant population of Yellowhammers exist in the surrounding hectad or just beyond.

In order to investigate these data on Yellowhammers further, two survey⁸ visits were carried out on HE Hall land in April 2017: eighteen sightings of Yellowhammers were made within 300m of the ringing site, including three singing males within 200m. So the species was clearly breeding, as well as wintering, in the km square (NB. as explained below, many hedgerows and margins on this part of the farm are specifically managed for Yellowhammers). As it was obvious that HE Hall's farms didn't contain enough of the right habitat for ninety breeding pairs, we speculated they were coming from the surrounding farmland.

In 2018, therefore, we carried out a further structured survey⁹ of the four tetrads centred on Marden to establish the number of breeding Yellowhammer territories on HE Hall land. Volunteers carried out two surveys in the breeding season, walking transects specifically to record Yellowhammer breeding territories and the habitat in which they were found. Only five breeding territories were identified on HE Hall land.

Our conclusion was that the local breeding population of Yellowhammers exists on surrounding farmland, wherever suitable habitat is found (ie. weedy arable field margins alongside low hedgerows with plentiful vegetation at the base). Given that the KOS Breeding Bird Atlas 2008-2013 cites the increase of autumn-sown crops and the efficiency of modern harvesting practices as a reason for the species' decline in Kent, the provision of locally-sown winter bird crops and supplementary feeding is essential to maintain overwinter survival. Birds that survive can then benefit from the breeding habitat where this is being maintained in the typical Low Weald landscape.

However, Marden's high percentage of Kent's ringing totals for these species may simply be because the area has an active group of ringers. The question must then be asked: how many farmland birds are there elsewhere in Kent that are *not* being counted in some way? Furthermore, if they *are* being counted, how are these counts recorded so they can feed into conservation and planning decisions?

This question of KOS record keeping is considered in the penultimate section but, first, how do birders link-up with wildlife-friendly farmers?

Building a productive relationship

Farmers, of course, are key to improving the fortunes of farmland birds and many are keen and willing to do so. But most lack specific ornithological knowledge, so it makes sense for birders to help fill the gap. Pairing up with a willing farmer is a practical way for KOS members to add value to their birding; you'll enjoy the 'right to roam' over farmland, and the satisfaction of your feedback on species seen (or seen to be absent) prompting a genuine 'what can I do to help?'

I first met Peter Hall when, as an RSPB volunteer, I was sent to one of his farms in Marden as part of their Volunteer & Farmer Alliance project (VFA) which ran from 1999 to 2012, whereby farmers could request a visit from the Society to census birds on their farm. The RSPB obtained data on red-listed farmland birds and, in return, the farmer got bespoke advice on what they could do to benefit their birds. After my required two survey visits, Peter's open invitation to 'visit whenever you like' was too good to miss and so started a long-standing relationship that has developed to the point where my advice is sought on matters as diverse as hedge-cutting, management of field margins around cereal crops and creating areas of scrub to attract Nightingales *Luscinia megarhynchos*.

It helped that it was immediately obvious his farm already had species such as Yellowhammer and turtle dove *Streptopelia turtur*. When I enquired if he was in an agri-environment scheme (AES) (Entry Level Stewardship (ELS), for example) the answer was a gruff "I don't like being told what to do on my farm by someone in Peterborough with a clipboard!" 'Nough said!

The Yellowhammers weren't there by chance of course, but Peter wasn't aware that they were mainly in fields with low hedgerows, wide un-mown field margins and song posts for males. When it was pointed out, this management routine was maintained and extended to other parts of the farm. Yellowhammer numbers increased as a result. With more simple suggestions, such as putting out additional feed for the birds in winter, they increased further, as did Linnets and other seed eaters, with winter flocks swollen by Reed Buntings, Chaffinches, Bramblings and even Tree Sparrows *Passer montana*. Now, counting these flocks and entering their numbers into BTO's BirdTrack can result in the error message 'Unusually high number for this species'.

At some point discussion of AES membership resurfaced as it seems Peter had been a member but was now seeking advice from an agricultural advisor to apply for Higher Level Stewardship (HLS) and the accompanying higher payments from DEFRA. The fact that we had already amassed several years' data on bird numbers through regular observation and, latterly, regular ringing, all linked to bird-friendly

management practices, were positive factors in achieving HLS. It also created a demand for yet more data, so additional local birders were encouraged to roam the farm and supply me with lists of what they had seen. Records for other taxa were sought as well, so dragonfly, plant and other enthusiasts were welcomed to the fold. Their sightings are now continually collated for Peter and the 'Peterborough clipboards'. Ringing sessions were enthusiastically accommodated – net rides were cut and mown by farm staff, supplementary feed was supplied in generous quantities, and the not-unsubstantial costs of rings used by the volunteer ringers were met.

While the conclusion we drew from our investigation into Yellowhammer numbers will be unsurprising to experienced birders, it did prompt opportunities to spread the word to other farmers. Our local Farming and Wildlife Advisory Group¹⁰ adviser ran a one-day course on Peter's farm to promote wildlife-friendly farming and we were able to demonstrate first-hand what Yellowhammer habitat looks like. Good weather and time of day combined to provide the perfect 'visual aid' of a hedgerow peppered with bright yellow birds. One of the day's outcomes was more invitations from local landowners to "come and see if I've got anything interesting". As a result, several more receptive farmers were recruited for the RSPB's supplementary feeding project for turtle doves, and I received *carte blanche* to wander even further.

Opportunities presented themselves to visit obscure, rarely-visited bits of woodland, or damp un-ploughable corners of land on the local floodplain. It's surprising how quickly reports of "that little woodpecker, you know, the black and white one that doesn't have red on it" and other once common birds like Spotted Flycatcher *Muscicapa striata* can liven-up your farmland wandering. It can easily become overwhelming of course, but it's manageable if landowners' enthusiasm can be encouraged by drawing upon the expertise of local representatives of the statutory and voluntary conservation bodies. As a birder, there is only so much advice I can offer about what to do with an overgrown, neglected wet woodland, even less on how to manage it for bats; better to introduce the owner to the local specialists. As one local farmer put it

"We are amazed at the number of bright, engaging and skilled people working in public bodies in the area of nature conservation and allied trades we've met recently. They all know each other, and go to each others' meetings. I suppose back in the bad old days a few years ago, all these bright, engaging and talented people with science degrees would be working as chemical company reps."

This from a farmer whose first response to my suggestion that we invite an RSPB person along to a conservation-focussed meeting with local farmers was "I'm not sure about that. Lots of farmers don't like the RSPB." How times change. Time for birders to change with them perhaps.

The Packham effect

When I first volunteered with the RSPB we were advised not to be drawn into discussion with farmers about fox-hunting or shooting. Now, the latest (often slanted) press headline about what Chris Packham has allegedly said or done is the subject likely to be brought up. This can actually provide an opportunity for a

rational discussion about the plight of our wildlife. There is now so much research available – which is rarely, of course, published in the newspapers – to inform these conversations, so now discussion can be constructive rather than adversarial. And it works both ways: it's easy to argue the science that says Magpies *Pica pica* are not the cause of farmland bird declines, but when the farmer plants special crops to feed the birds through the winter, leaves untidy areas for them to forage in, and grows and manages a perfect hedgerow for them to breed in – only to watch a pair of Magpies systematically search the hedge to predate their nests - you see it through another pair of eyes.

We all get protective of 'our' birds. If you're proud of your turtle doves, you don't want some idiot with a gun shooting them as a 'pigeon' or an 'aerial rat' as soon as they fly over your hedge onto someone else's land. The organisation *Wild Justice* recently challenged Natural England's legal position on allowing anyone with a shotgun to go out and shoot so-called vermin without any controls or monitoring of its impact on wildlife generally. Headlines like '*Packham targets shooters*' didn't go into that sort of detail and deliberately promoted a 'them *versus* us' situation. On this occasion, it was an opportunity to explore the wider issues of licensing, indiscriminate shooting and lack of accountability. Seen from different points of view, it made for a measured and helpful discussion. And as a birder, I now know what's needed to complete an application form for a licence to shoot Magpies.

Urbanisation and development – and why KOS records matter

When the threat of mass house building on surrounding farmland horrified locals it led to demands to "protect our countryside and wildlife". But few knew what wildlife, even birds, they had. Suddenly, our knowledge of the local birds and wildlife was in demand and invitations to look around yet more farmland started to multiply.

But my salutary experience relating to housing development is worth bearing in mind by birders serious about conservation. A local company of ecological consultants were tasked with a preliminary survey of one of the proposed sites. Their first step was to consult the Kent & Medway Biological Records Centre (KMBRC). Surprisingly, this revealed few records of birds on the threatened farmland, and even fewer of other taxa. Just 169 bird records were provided; of these, 58 were provided from the same map reference in the centre of the village. The consultants made no mention of the National Biodiversity Network (NBN) database - perhaps because that takes time to update and is therefore of limited use. Significantly, though, they had not paid to consult the BTO database, and neither did they recommend to the developer that this should be done. They did, however, recommend a full survey should the planning application proceed – presumably to be carried out by their own personnel. So without the data collected by our group of volunteers, the planning authority would have a less-than-complete picture of the wildlife value of the site.

How often do birders record casual observations of scarce species on BirdTrack (or even of common species – remember what happened to house sparrows)? I had assumed that all our ringing data from the area, and the data from 24 years of BTO Breeding Bird Surveys on the proposed development site itself, would be lodged

with the KMBRC. At the time of writing, it isn't. Moreover, in 2015 a document entitled 'A Natural Capital Asset Check for Kent',¹¹ was prepared for KCC. This states, in the section referring to the Low Weald, after acknowledging the importance of birds as indicators of a healthy environment,

"this data [birds] has not been incorporated as it appears not to be collected on a consistent annual basis and so may reflect varying recorder effort, rather than bird presence".

Enlightened farmers and landowners are increasingly farming for wildlife. So how should birders (especially KOS members) ensure that the birds they see on farmland are counted and recorded so that we know, and planning authorities know, what birds are where in Kent?

My suggestion is:

- Submit lists of sightings (including the common species) to BirdTrack, preferably with an estimate of numbers and breeding status. These are passed on to KOS and ultimately KMBRS every year.
 - Rare species (or birds in a sensitive location) can be marked as such so the record is confidential.
 - Species likely to be of immediate interest to local birders (passage migrants, for example) can also be listed on the sightings page of the KOS website giving details of where/how to see them.
 - Where regular visits are made to a particular site, rather than use a general reference such as 'Tonbridge', which will be the town centre, use the BirdTrack 'drop a pin' facility to mark the actual site or area where the birds were.
- Ringers, and birders carrying out BTO surveys, in addition to uploading their data direct to the BTO website, should also add the list of birds they have encountered to BirdTrack. That will ensure KOS, and eventually KMBRS, have it so that it is available, should it be needed, to inform conservation action.

Through a glass darkly

There is no doubt that significant changes to agriculture, or at least to the way farmers are paid to farm, will be forthcoming as we finally depart the European Union (EU). As politicians produce sound-bites to burnish their green credentials, it remains to be seen how the UK's proposed Environmental Land Management System (ELMS)¹² will work in practice once it starts in 2024. Its intention is that landowners will be required to produce 'public goods', including wildlife, as well as food in order to qualify for taxpayers' money. This is certainly to be welcomed after the prairie-scale monocultures encouraged by the EU's Common Agricultural Policy (CAP).

Early indications from trials are positive in terms of encouraging farming with wildlife in mind – although early adopters tend to be converted to the cause already. But the system is intended to be ‘payment by results’. Where birds are concerned this could raise interesting questions; a farmer could count a good number of a particular species in her crop, but have no suitable nesting habitat – that could be on an adjoining farm. So who gets the money? Will payment be based on an area containing several farms, so all farmers have to do their bit for the common good? And who identifies species and counts the individuals – birds, butterflies, *et al.*? Self-assessment has obvious drawbacks where payments are concerned, so an opening for birders perhaps?

Whatever the future has in store, many landowners as well as the general public like to see wildlife thrive on their land. Whether or not we achieve that depends on political will, public pressure and farmers. While KOS members have limited impact on the first two, as individuals we can make a significant contribution to the third by working with willing farmers. As well as counting and reporting the birds we see, we will also derive a lot of enjoyment and satisfaction in the process.

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